

(19)



Europäisches Patentamt
European Patent Office
Office européen des brevets



(11) Publication number:

0 526 166 A3

(12)

EUROPEAN PATENT APPLICATION(21) Application number: **92306883.7**(51) Int. Cl.⁵: **G06F 15/42**(22) Date of filing: **28.07.92**(30) Priority: **29.07.91 US 737351**(43) Date of publication of application:
03.02.93 Bulletin 93/05(84) Designated Contracting States:
AT BE CH DE FR GB LI NL SE(88) Date of deferred publication of the search report:
09.02.94 Bulletin 94/06(71) Applicant: **Dessertine, Albert L.**
53 Park Avenue
Flemington, New Jersey 08822(US)(72) Inventor: **Dessertine, Albert L.**
53 Park Avenue
Flemington, New Jersey 08822(US)(74) Representative: **Ablewhite, Alan James**
MARKS & CLERK
57/60 Lincoln's Inn Fields
London WC2A 3LS (GB)(54) **Patient compliance monitoring method and system.**

(57) The present invention is directed to a method of monitoring a patient's medicine compliance. It involves utilizing an automatic compliance monitoring device which tracks patient compliance data, along with a wave energy transmitter and power source, all connected to a medicine container. A receiver is connected to a computer with a display unit. The compliance monitoring device or the computer is programmed to calculate compliance requirements of the container e.g. by number of cap openings, by dispensing count or by weight information obtained by the automatic compliance monitoring device, for each dosage administration for the prescription period. The wave energy transmitter on the medicine container continuously, periodically, or randomly transmits raw or calculated data to the receiver and from there to the computer to compare actual usage with compliance required, to determine compliance results on the display unit to permit compliance monitoring on a monitor at a remote location. Optionally, other patient characteristics are also monitored and feedback is provided. The present invention includes both the method and the system of interconnected devices to practice the method as well as a single component which includes in combination, the medicine container, compliance device, transmitter and power source. Feedback may be to any professional or any remote location, and a single

medicine or a plurality of medicines may be monitored.

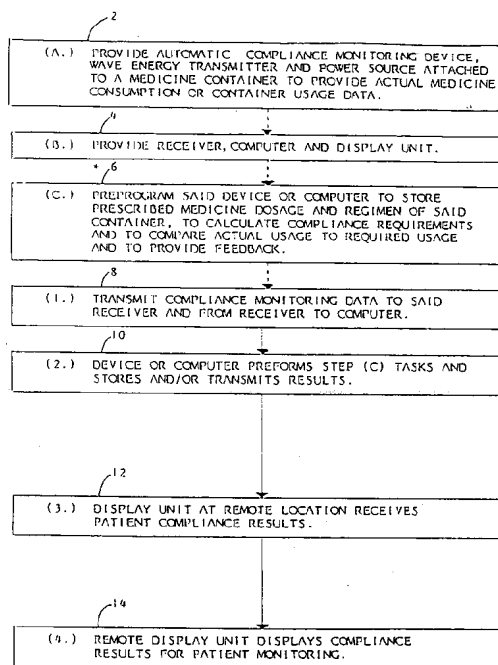


FIG. 1

EP 0 526 166 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 92 30 6883

DOCUMENTS CONSIDERED TO BE RELEVANT							
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)				
X	EP-A-0 370 599 (APREX CORPORATION, US) 30 May 1990 * column 2, line 52 - column 3, line 55 * * column 7, line 30 - column 8, line 6 * ---	1-14	G06F15/42				
X	US-A-5 014 875 (C.F.MCLAUGHLIN ET AL) 14 May 1991 * column 2, line 15 - column 3, line 20 * ---	1-14					
A	EP-A-0 301 672 (APREX CORPORATION, US) 1 February 1989 * column 3, line 55 - column 6, line 45 * ---	1-14					
P,A	US-A-5 047 948 (J.D.TURNER) 10 September 1991 * column 3, line 35 - column 5, line 32 * ---	1-14					
A	US-A-4 617 557 (R.E.GORDON) 14 October 1986 * the whole document * ---	1-14					
A	US-A-4 869 392 (T.S.MOULDING JR. ET AL) 26 September 1989 * column 2, line 5 - line 47 * ---	1-14	TECHNICAL FIELDS SEARCHED (Int.Cl.5)				
A	US-A-4 725 997 (J.URQUHART ET AL) 16 February 1988 * the whole document * ---	1-14	G06F A61J A61G				
A	EP-A-0 129 785 (SIMON UDO, GERMANY) 2 January 1985 * the whole document * ---	1-14					
D,A	US-A-4 899 839 (A.L.DESSERTINE, US) 13 February 1990 * the whole document * -----	1-14					
The present search report has been drawn up for all claims							
Place of search THE HAGUE		Date of completion of the search 16 December 1993	Examiner Barba, M				
<table><tr><td>CATEGORY OF CITED DOCUMENTS</td><td>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document</td></tr><tr><td>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</td><td></td></tr></table>				CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document	X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document	
CATEGORY OF CITED DOCUMENTS	T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application I : document cited for other reasons & : member of the same patent family, corresponding document						
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document							